In this presentation, first, the importance and roles of patients in healthcare research and decision-making will be presented. Then, preference research and its potential value will be introduced. Finally, findings and implications from preference research in osteoarthritis will be presented. Current studies have suggested that potential benefits and risk of adverse events have to date been shown to be the most influential characteristics for both patients and physicians. Results from a recent ESCEO working Group that conducted a cross-European discrete-choice experiment in osteoarthritis will also be shown

SY3

DRUGS SAFETY IN THE TREATMENT OF OSTEOARTHRITIS: A CRITICAL APPRAISAL

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Objective: To review international recommendations for the treatment of Osteoarthritis (OA), with particular emphasis on safety of the most commonly prescribed drugs.

Material and methods: The most recent literature has been analyzed and the main safety issues identified in meta-analyses and systematic reviews will be reported for each drug treatment

Results: Paracetamol is widely recommended as the first-line analgesic for OA, but the most recent evidence suggest low efficacy for OA pain and potential safety issues, related to liver and gastrointestinal (GI) toxicity, particularly in older patients. Symptomatic slow-acting drugs for OA (SYSADOAs) include several different agents, such as glucosamine, chondroitin, diacerein, and avocado soybean unsaponifiables. Only prescription-SYSADOAs, not over-the counter products are recommended, and in particular prescription crystalline glucosamine sulfate (pCGS) and chondroitin sulfate (CS) represent a first-line treatment (not in combination), because of their efficacy on controlling pain and improving function in OA, with no significant increased risk of adverse effects (AEs) versus placebo. Safety issues related to the use of CGS in people with diabetes and CVD have been addressed in recent clinical trials, and CGS at oral recommended doses for OA treatment, showed no interference with glucose metabolism in normoglycemic subjects and in those with hyperglycemia, pre-diabetes or diabetes. Several AEs have been reported for diacerein, in particular severe diarrhea and dizziness that in older, frail patients have to be regarded as a potentially very serious AE. Only minor, local AEs have been reported for Topical Nonsteroidal anti-inflammatory drugs (NSAIDs), and they are considered safer than oral NSAIDs(non-selective NSAIDs and selective COX-1 and 2s). Topical NSAIDs are therefore recommended, particularly for older patients at higher risk for GI, CVD, and renal AEs and might be considered as cyclic add-on analgesia in patients still symptomatic after the use of pCGS or CS.

Conclusions Clear indications for which drugs are safer in the OA treatment are currently available and clinical practice should reflect the available recommendations.

SY4

WHAT MAKES A DIFFERENCE BETWEEN SYSADOAS

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ESCEO recently updated its guidelines for the management of osteoarthritis of the knee. Because of the increase in concerns about safety of Paracetamol, SYSADOAs were upgraded and are now recommended as the first-line background therapy in symptomatic patients. However, ESCEO clearly mentions that whereas micro-crystalline Glucosamine Sulfate and pharmaceutical-grade Chondroitin Sulfate have shown their ability to improve pain and function, these results cannot be extrapolated to other SYSADOAs. The assessment of the interest of the respective SYSADOAs for the management of osteoarthritis is based on three major pillars. First of all, the efficacy of the drug should be unequivocally demonstrated in double-blind randomized placebo-controlled trials assessing pain and function through primary endpoints which have been validated by the regulatory authorities. Since these drugs will be used for several years, their safety should be absolute, on all body systems and not only on the musculoskeletal tissues. Eventually, since we are living in a cost-conscious world, the cost-effectiveness of treatments against osteoarthritis should be evaluated, with a validated methodology, allowing to compare the interest of spending money for the management of knee osteoarthritis with the different therapeutic approaches that can be offered in other chronic disorders. Based on this, micro-crystalline Glucosamine Sulfate has shown its ability to reduce pain and improve function, mainly in patients with knee osteoarthritis of grade 1 – 3. No adverse events were linked to its prolonged use, even in patients with glucose intolerance. It has been shown to be cost-effective compared to placebo and compared to other preparations of Glucosamine, in the short-term as well as after many years of administration.

SY5

COULD YOUR OSTEOPOROSIS PATIENT BE HIDING ANOTHER BONE DISORDER?

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Guided by international experts, this interactive symposium is designed to provide attendees with specialist knowledge regarding the clinical identification of patients with rare metabolic bone disorders. Over the past 40 years, clinical practice has changed substantially because of the pivotal research and advances in our understanding of complex regulatory pathways and bone biology.[1] Despite this progress a significant unmet need remains, given that patients with rare bone disorders often suffer delays in diagnosis.[2,3] Early diagnosis and treatment of these disorders provide an opportunity to improve clinical outcomes while preventing life-long complications.[3,4]

To help optimise diagnosis and clinical decision making, a panel of renowned experts will discuss challenges and provide case study-led discussion on key aspects in this field, including:

- the complexity of correct diagnosis of osteomalacia *vs.* osteoporosis
- bone histomorphometry in the diagnosis of osteomalacia and its differences from osteoporosis
- fibroblast growth factor 23 (FGF23)-mediated osteomalacia
- how to correctly diagnose patients with X-linked hypophosphatemia

Attendees will have the chance to engage with the experts throughout the symposium in an interactive Q&A session and keypad voting, with open